

XXXVI.—*Descriptions of new Reptiles and Batrachians from the Loo Choo Islands.* By G. A. BOULENGER.

A COLLECTION of Reptiles and Batrachians recently made by Mr. Holst on Okinawa, or Great Loo Choo, contains, in addition to most of those previously reported by me (Proc. Zool. Soc. 1887, p. 146) as obtained by the late Mr. H. Pryer, examples of the following known species and of three which I regard as undescribed:—

*Nicoria Spengleri*, Gm.; *Eumeces marginatus*, Hallow.; *Dinodon semicarinatus* (= *Eumesodon semicarinatus*, Cope, = *Lepidocephalus fasciatus*, Hallow.); *Callophis japonicus*, Gthr.; *Rana macropus*, Blgr.

*Trimeresurus okinavensis*, sp. n.

Snout short, obliquely truncate, prominent, with sharp raised angle all round; eye rather small. Rostral deeper than broad, not visible from above; upper head-scales small, juxtaposed or subimbricate and smooth on the snout and vertex, imbricate and obtusely keeled on the occiput; 6 to 9 scales in a transverse series between the supraoculars, which are large, larger than the eye; a pair of scales behind the rostral, separating the internasals in front; three series of scales between the eye and the upper labials; 7 or 8 upper labials, second entering the loreal pit, third largest; temporal scales obtusely keeled. Scales strongly keeled, in 21 or 23 rows. Ventrals 129–130; anal entire; subcaudals 43–47 pairs. Brown above, with darker cross bands or alternating large quadrangular blotches; upper surface of head dark brown, sides blackish, with a lighter streak along the temple; lower parts brown, with a series of blackish blotches on each side, partly on the ventrals, partly on the two lower rows of scales.

Total length 350 millim.; tail 60.

Closely allied to *T. monticola*, Gthr. Distinguished by the somewhat larger eye, the raised canthus rostralis, and the strongly keeled scales.

*Rana Holsti*, sp. n.

Near *R. temporaria*. Vomerine teeth in two well-developed oblique groups behind the level of the choanæ. Head broader than long; snout rounded, slightly prominent, as long as the diameter of the orbit; loreal region nearly vertical, slightly concave; nostrils a little nearer the end of the

snout than to the eye, the distance between them equal to the interorbital width, which equals the width of the upper eyelid; tympanum very distinct, circular, measuring two thirds diameter of eye and about once and a half its distance from orbit. Fore limb longer than tibia; first finger extending considerably beyond second; tips of fingers blunt, subarticular tubercles strong; a very prominent knob (rudiment of pollex) on inner side of first finger. Tibio-tarsal articulation reaching the eye; tibia slightly longer than foot, half length of head and body. Toes three-fourths webbed, the two distal phalanges of fourth toe free, but with the membrane prolonged as a narrow fringe on each side; subarticular tubercles strong; inner metatarsal tubercle blunt, elliptical, not very prominent, three fifths length of inner toe; no outer metatarsal tubercle; no tarsal fold. Back with a few scattered small warts, sides and hind limbs with numerous warts; body and limbs with whitish pearl-like excrescences; glandular lateral folds prominent, broken up into warts behind, nearly parallel, the distance between them on the scapular region two ninths length of head and body. Olive-brown above, sides with blackish spots; a blackish temporal spot; tympanum reddish brown; a light streak from below the eye to the angle of the mouth; limbs with dark cross bars; hinder side of thighs marbled with black; throat spotted with brown; belly with a few brown dots.

	millim.
From snout to vent .. . . . . .	120
Length of head .. . . . . .	37
Width of head .. . . . . .	43
Diameter of eye .. . . . . .	12
Interorbital width .. . . . . .	11
From eye to nostril .. . . . . .	9
"    "    end of snout .. . . . . .	17
Tympanum .. . . . . .	8
From eye to tympanum .. . . . . .	5
Fore limb .. . . . . .	70
Hind limb .. . . . . .	170
Tibia .. . . . . .	58
Foot .. . . . . .	55
Inner toe .. . . . . .	14
Inner metatarsal tubercle .. . . . . .	8

A single female specimen.

This species bears great affinity to *Rana temporaria*, from which the more elongate inner metatarsal tubercle and the prominent rudiment of pollex, which is probably accompanied by an unusual development of copulatory excrescences in the male, easily distinguish it. In size it equals the largest form of the group, *R. Draytoni*, B. & G.

*Tylototriton Andersoni*, sp. n.

Palatine series of teeth originating a little in front of the choanæ, close together and parallel in front, then slightly diverging, parallel again in the middle, strongly diverging behind. Tongue oval, free on the sides and slightly behind, rather large, its width half that of the mouth. Head as broad as long; snout obtusely acuminate, the lateral outline of the head subtriangular; a rather feeble obtuse ridge along the canthus rostralis and the fronto-squamosal arch; eye moderate; no labial lobes; a short but very prominent parotoid gland. Body twice and a half length of head, much depressed, closely covered with prominent warts of unequal size; vertebral ridge prominent; a series of 14 knob-like glands on each side, the tenth above the hind limb; some of these warts pierced by the extremity of the rib, as in *Molge* (*Pleurodeles*) *Waltlii*. A transverse gular fold. Limbs moderate; fingers and toes very short, depressed; fifth toe shortest, almost rudimentary; the hind limb stretched forwards reaches the elbow of the adpressed fore limb. Tail sharp-edged above and below, but without distinct crests, ending in an obtuse point; its length exceeding that of head and body. Black above and below; palms and soles and lower edge of tail orange.

	millim.
Total length .....	144
From snout to cloaca .....	67
Head .....	19
Width of head .....	19
Fore limb .....	24
Hind limb .....	25
Tail .....	77

A single specimen, which I suppose to be a female.

This species is named after Dr. J. Anderson, to whom science is indebted for the discovery of the remarkable newt on which he established the genus *Tylototriton* in 1871. It is easily distinguished from *T. verrucosus* in the triangular instead of semielliptical outline of the head, the less developed cranial ridge, the larger tongue, the shorter digits, and the rudimentary condition of the fifth toe.

XXXVII.—*On the Larva of Molge Montandoni*.

By G. A. BOULENGER.

*MOLGE MONTANDONI* is one of the few European newts the larva of which is still undescribed. Having been favoured this spring, by Professor von Mähely, with living examples